COASTAL CONSERVANCY

Staff Recommendation June 18, 2020

TIJUANA RIVER VALLEY SEDIMENT MANAGEMENT WORK PLAN AND MONITORING PROGRAM

Project No. 20-024-01
Project Manager: Sam Jenniches

RECOMMENDED ACTION: Authorization to disburse up to \$500,000 to the City of Imperial Beach to prepare a Sediment Management Work Plan and Monitoring Program for the Tijuana River Valley in San Diego County.

LOCATION: Tijuana River Valley, County of San Diego

PROGRAM CATEGORY: Integrated Coastal and Marine Resources Protection

EXHIBITS

Exhibit 1: Project Location Maps

Exhibit 2: Project Photos

Exhibit 3: Project Letters

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31111, 31111.3 and 31220 of the Public Resources Code:

"The State Coastal Conservancy hereby authorizes the disbursement of an amount not to exceed five hundred thousand dollars (\$500,000) to the City of Imperial Beach ("the grantee") to prepare a Sediment Management Work Plan and Monitoring Program for the Tijuana River Valley in San Diego County.

Prior to commencement of the project, the grantee shall submit for the review and written approval of the Executive Officer of the Conservancy the following:

- 1. A detailed work program, schedule, and budget.
- 2. Names and qualifications of any contractors to be retained in carrying out the project.
- 3. A plan for acknowledgement of Conservancy funding."

Staff further recommends that the Conservancy adopt the following findings:

"Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

- 1. The proposed authorization is consistent with Chapters 3 and 5.5 of Division 21 of the Public Resources Code, regarding funding plans and integrated coastal and marine resources protection, respectively.
- 2. The proposed project is consistent with the current Conservancy Project Selection Criteria and Guidelines."

PROJECT SUMMARY:

Staff recommends that the Conservancy authorize disbursement of up to \$500,000 to the City of Imperial Beach to prepare a Sediment Management Work Plan and Monitoring Program for the Tijuana River Valley in San Diego County. The Sediment Management Work Plan and Monitoring Program (the Plan) will be used to inform the development, design and implementation of future capital projects in the Tijuana River Valley ("TRV" or "Valley").

Watershed systems are dynamic landscape features that drain rainfall and transport sediment and debris into streams, rivers and oceans. In the Tijuana River watershed, sediment transported from upstream natural and disturbed watershed areas converge in the TRV through contributions from the main Tijuana River and several prominent tributaries in both the United States (U.S) and Mexico. The TRV supports a diverse array of critical habitats and serves as a hydrological and biological crossroads, where upland, wetland, estuarine, and ocean environments interact. Population increases and the associated housing development in the Tijuana metropolitan region have outpaced the ability of Mexican local, state, and federal agencies to cope with the pressures on area infrastructure. Unpermitted and improvised housing exacerbates sediment delivery into the TRV and often results in the introduction of untreated wastewater and solid waste into the system. This sediment and the associated pollutants cross the border into the TRV during precipitation events, and sometimes during dry weather flows. Infrastructure on the U.S. side of the border has failed to successfully manage those flows when they reach the U.S., resulting in significant impacts to habitat and public health.

A sediment management plan for the TRV has been a long-term goal of the local municipalities and state and regional agencies working in the TRV. A plan was proposed by stakeholders of the Tijuana River Valley Recovery Team (TRVRT) in 2012 and formalized as a Tier 1 project in TRVRT's Five Year Action Plan in 2015, though never funded and implemented. The U.C. Irvine-led Sediment Resilient Infrastructure & Sustainable Environments project (SedRISE) further identified sediment beneficial reuse as essential for the TRV, but recognized that cost, contaminant management, and permitting are significant constraints to project implementation. Finally, recent work conducted as part of the Senate Bill 507-funded Tijuana River Valley Needs and Opportunities Assessment (SB 507 Needs Assessment, 2020) identifies

potential management strategies that could be implemented on the U.S. side of the border. The strategies would address transboundary flows of sewage, trash, and sediment and includes various options for the construction of in-channel or off-channel sediment capture basins. A monitoring program for sediment and water quality is among the projects recommended by the SB 507 Needs Assessment.

The Plan will provide a comprehensive framework to inform the project development, stakeholder maintenance and land management strategies identified in the SB 507 Needs Assessment. It will provide the basis of the Valley stakeholder decision-making process for future sediment management in the TRV. The Plan will align with current and anticipated regulatory processes, including the Regional Water Quality Control Board (RWQCB) Land Disposal and Total Maximum Daily Load (TMDL) Program, and will provide data to the RWQCB and permittees of the TMDL Program. These data will be necessary to demonstrate future compliance with the TMDL.

The Plan will utilize a proactive adaptive management plan process, addressing both the immediate near-term sediment management challenges and anticipated future sediment management needs. The Plan will identify current and potential sources of excess sediment, as well as current and potential sediment re-use alternatives that might reduce management costs.

The proposed project will include five main elements:

- 1. Compile and synthesize existing data and information;
- 2. Stakeholder Engagement;
- Identify sediment management opportunities, constraints and management actions;
- Development of a sediment management project and/or capital project work plan specific to the Valley and associated stakeholders that maximize local beneficial uses for sediment; and
- 5. Development of a sediment management monitoring program to support the work plan.

The proposed project will inform future capital projects that build on a history of Conservancy and State investment in the TRV. The Plan will help TRV stakeholders to implement and manage capital projects that will protect and restore sediment transport processes and habitats in the TRV. Outcomes of these sediment management projects will protect the structure and function of critical natural resources and wetlands, improve water quality, and protect vulnerable infrastructure that is subject to coastal flooding, sea-level rise and other impacts of climate change, while also protecting the public health of Californians that use these resources.

Site Description: The TRV is a broad natural floodplain containing a variety of wetland and riparian areas. The Valley is a small portion of the Tijuana River's 1,700 square mile watershed. The watershed area includes portions of southern San Diego County and northern

Baja California, Mexico. Adjacent the coast is the largest, intact and publicly-protected coastal wetland in the Southern California Bight, designated by the parties to the Ramsar Convention on Wetlands as a "wetland of international importance," and largely contained within the Tijuana River National Estuarine Research Reserve (Reserve). The valley is bounded on the south by high mesas and deep canyons covered by chaparral, sage scrub and grasslands culminating with the Border Wall at the U.S. – Mexico Border. Multiple tributary canyons enter the TRV from Mexico. The valley floodplain currently contains a mixture of agricultural fields, equestrian facilities, rural housing, riparian woodland and disturbed habitats. Sand mining and agriculture, which were significant activities in the past, have declined. Historically, the TRV has been significantly impacted by development in the greater Tijuana metropolitan area of Baja California, Mexico. Unchecked development and insufficient infrastructure introduce sources of sediment and pollution across the border into California.

Grantee Qualifications:

The City of Imperial Beach has extensive experience managing and implementing state sponsored grant projects. The City has successfully completed grants that involve capital construction, planning, and monitoring projects. The City operates an efficient grant administration team, which for this project will include the Natural Resource Director who will oversee project management. The City maintains capacity to take on the additional work related to the proposed project. The City also maintains sufficient cash flow and is very familiar with the state grant process from other projects. City staff dedicated to this project have had experience on previous projects supported by state grants.

The City of Imperial Beach is the Co-permittee lead on the implementation of the Water Quality Improvement Plans for the San Diego Bay and Tijuana River watershed, which was required by the San Diego Regional Municipal Separate Storm Sewer System (MS4) Stormwater permit issued by the RWQCB in 2013.

Project History:

Valley stakeholders have recognized and documented the importance of sediment management as a strategy to reduce flood risk and protect critical habitats and infrastructure for over 40 years. The development of a Valley-specific Sediment Management Plan was identified as an integral planning effort in the TRVRT Recovery Strategy. The Conservancy participated as a key contributing member of the TRVRT and in development of the Recovery Strategy. Subsequently, TRVRT's Five Year Action Plan (2015) identified preparation of a Sediment Management Plan as a Tier 1 priority project.

The Budget Act of 2019 (Assembly Bill 74, Ting) appropriated \$15 million to the Conservancy for the Tijuana River Border Pollution Control Project. Subsequently, Public Resources Code Section 31111.3 was enacted (Senate Bill 690, Hueso, 2019) to further guide the Conservancy's expenditure of these funds by stating, "When granting funds appropriated by Assembly Bill 74 (Chapter 23 of the Statutes of 2019 [the Budget Act of 2019]) for purposes of addressing transboundary flows and pollution in the Tijuana River Valley, the conservancy [sic] is encouraged to prioritize those projects identified in the studies described in subdivision (b) of

Section 5907.5, to the extent feasible." Section 5907.5 states that the County of San Diego shall, among other things, conduct "A study focused on the improvement and protection of natural lands, including the main river channel, in the Tijuana River Valley." The proposed project is identified in the County's Needs and Opportunities Assessment (2020), which was written to meet the requirements of Section 5907.5 of the Public Resources Code.

PROJECT FINANCING

Coastal Conservancy \$500,000
Project Total \$500,000

The expected source of funds for this project is the FY 2019/20 appropriation to the Conservancy from the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018 (Proposition 68, Public Resources Code Sections 80000-80173). Chapter 9 of Proposition 68 (section 80120-80121) allocates funds to the Conservancy to enhance and protect coastal and ocean resources, and, in particular, to grant funds to public agencies and nonprofit organizations for the protection of beaches, bays, wetlands, and coastal watershed resources. (Public Resources Code Section 80120 (c)).

The project will use part of the \$15 million of the Conservancy's FY 2019/20 Proposition 68 funds that were appropriated specifically for the Tijuana Border Pollution Control Project. Section 3111.3 of the Public Resources Code further guides the expenditure of these funds. Section 3111.3 states:

When granting funds appropriated by Assembly Bill 74 (Chapter 23 of the Statutes of 2019 [the Budget Act of 2019]) for purposes of addressing transboundary flows and pollution in the Tijuana River Valley, the conservancy [sic] is encouraged to prioritize those projects identified in the studies described in subdivision (b) of Section 5907.5, to the extent feasible.

Public Resources Code Section 5907.5 requires the County to conduct a study that addresses the improvement and protection of natural lands, including the main river channel, in the Tijuana River Valley [5907.5(b)(2)]. To meet this requirement, the County produced its Needs and Opportunities Assessment (2020).

Consistent with the purposes of Proposition 68, the proposed project consists of the preparation of a sediment management work plan and monitoring program which is critical to the implementation of future capital projects, that, when implemented, will protect the beaches, wetlands and coastal resources of the Tijuana River Watershed and adjacent areas.

The proposed project is consistent with the funding guidelines for expenditure of Proposition 68 adopted by the Conservancy on December 6, 2018 (Guidelines). (See Pub. Res. Code section

80010). As described in the Guidelines, Proposition 68 requires that at least 15% of the total funds available under Chapter 9 be used for projects that serve severely disadvantaged communities (SDACs), defined as a community with a median household income less than 60 percent of the statewide average. (Section 8008(a)(2)). Under the Guidelines, "serving" an SDAC means the project is located within an SDAC, located within a mile of an SDAC, or is not located in an SDAC but provides other benefits to an SDAC. For this project, approximately \$500,000 will be used to prepare a sediment management plan and monitoring program for the Tijuana River Valley, which will be used to inform future capital projects that will protect the beaches, wetlands and coastal resources of the Tijuana River Watershed and adjacent areas. The proposed project will consider current and future project sites that are either within one mile of an SDAC or that would benefit resources frequently used by residents of the nearby SDACs.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

The proposed project would be undertaken pursuant to Chapter 3 (Sections 31111 and 31111.3) and Chapter 5.5 (Section 31220) of the Conservancy's enabling legislation, Division 21 of the Public Resources Code regarding funding plans and integrated coastal and marine resources protection, respectively.

Consistent with Section 31111, the proposed authorization would fund a public agency, the City of Imperial Beach, to "undertake plans" for sediment management and monitoring in the Tijuana River Valley.

Consistent with Section 31111.3, the proposed authorization would fund a project identified by the Tijuana River Valley Needs and Opportunities Assessment (2020), which was prepared consistent with the requirements described in subdivision (b) of Section 5907.5.

Consistent with Section 31220(a), the proposed project would "protect coastal ... water quality and habitats" by preparing a "sediment management" plan. The State Water Resources Control Board was consulted to ensure consistency with Chapter 3, section 30915 of Division 20.4 of the Public Resources Code.

Consistent with Section 31220(b), the proposed project "(2) Protects ... fish and wildlife habitat within coastal ... waters and coastal watersheds" and "(6) ... protects and restores coastal wetlands, riparian areas, floodplains, and other sensitive watershed lands, including watershed lands draining to sensitive coastal or marine areas."

The proposed project will result in a Sediment Management Work Plan and Monitoring Program to support project development and analysis consistent with current and anticipated regulatory processes, including the San Diego Regional Water Quality Control Board Land Disposal and Total Maximum Daily Load Program.

The proposed project is consistent with the Tijuana River Valley Local Coastal Plan Land Use Plan as described in the "Consistency with Local Coastal Program Policies" section, below.

CONSISTENCY WITH CONSERVANCY'S 2018-2022 STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):

Consistent with **Goal 6, Objective C** of the Conservancy's 2018-2022 Strategic Plan, the proposed project will develop a sediment management work plan and monitoring program that will support design and implementation of capital projects that will restore and enhance coastal habitats of the Tijuana River and Estuary.

Consistent with **Goal 6, Objective F** of the Conservancy's 2018-2022 Strategic Plan, the proposed project will develop a sediment management work plan and monitoring program that will support the design and implementation of capital projects that will benefit the coastal and ocean resources of southern San Diego County.

Consistent with **Goal 16, Objective A** of the Conservancy's 2018-2022 Strategic Plan, the proposed project will help inform the design and implementation of capital projects that will benefit water quality and public health in the Tijuana River Valley and adjacent beaches and thus directly benefit disadvantaged communities of southern San Diego County who use those resources.

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA & GUIDELINES:

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines, last updated on October 2, 2014, in the following respects:

Required Criteria

- 1. **Promotion of the Conservancy's statutory programs and purposes:** See the "Consistency with Conservancy's Enabling Legislation" section above.
- 2. **Consistency with purposes of the funding source:** See the "Project Financing" section above.
- 3. Promotion and implementation of state plans and policies:

California Climate Adaptation Strategy:

The proposed project is consistent with Strategy 4: Practice and Promote Integrated Flood Management – Flood Management Improvements because it will plan for the management of sediment to facilitate future capital projects that may increase the floodplain's ability to effectively receive floodwaters.

And Strategy 5: Enhance and Sustain Ecosystems – Species Migration and Movement Corridors, Floodplain Corridors because it will plan for the management of sediment to facilitate future capital projects that may improve water quality and habitat for species migration and movement.

California Wildlife Action Plan:

The proposed project will benefit species identified as of critical importance in the South Coast Province because it will plan for the management of sediment to facilitate future

capital projects. These future projects may improve habitat for listed species such as the least Bell's vireo and light-footed clapper rail.

The proposed project is consistent with the *California Coastal Sediment Management Master Plan – San Diego Region* as it will improve the implementation of critical sediment management projects in the Tijuana River Valley.

- 4. **Support of the public:** The proposed project is supported by the following entities and individuals:
 - Senator Ben Hueso, CA Senate District 40
 - Tijuana River Valley Recovery Team ("Recovery Team or TRVRT")
 - San Diego Regional Water Quality Control Board
 - Border Field State Park
 - Tijuana River National Estuarine Research Reserve
 - San Diego County Supervisor Greg Cox
- 5. **Location:** The proposed project is located within the Tijuana River Valley Local Coastal Plan Land Use Plan area in the City of San Diego.
- 6. **Need:** Without Conservancy funding, the proposed project will be further delayed until appropriate funding is identified.
- 7. **Greater-than-local interest:** The Tijuana River Estuary is a RAMSAR wetland of international importance. The Tijuana River National Estuarine Research Reserve, Border Field State Park, and Tijuana River Valley Regional Park are visited by people from all over the world. The issue of sediment management and the associated control of pollutants, contaminants and trash at the U.S. Mexico Border in the Tijuana River Valley impacts the residents of southern San Diego County as well as visitors from the region and beyond.

Sea level rise vulnerability: The proposed project will support the development and implementation of capital projects that will lead to sustainable sediment management actions that are resilient to a changing climate and sea level rise. Sustainable management actions for beach replenishment may lead to improved resiliency for various sea level rise scenarios. Portions of the disadvantaged community of Imperial Beach, U.S. Navy property at the Navy Outlying Field Imperial Beach, and state and federally-designated habitat may benefit from improved coastal resiliency from capital projects derived from the proposed project.

Additional Criteria

8. **Urgency:** The Tijuana River Valley and adjacent beaches are already experiencing frequent closures due to water quality issues associated with sediment flows at the U.S. – Mexico border. Significant federal funding for the capital projects that the proposed project will support has been authorized, but not yet appropriated.

- 9. Readiness: The City of Imperial Beach is prepared to begin the project upon authorization.
- 10. Realization of prior Conservancy goals: See "Project History" above
- 11. **Cooperation**: Engagement and cooperation of stakeholders is a key element of the proposed work plan and monitoring program. The proposed project will draw upon Valley-focused advisory groups including the Tijuana River Valley Recovery Team, Minute 320 Working Groups, and the Tijuana National Estuarine Research Reserve Advisory Council. Stakeholders will include California State Parks, San Diego County, the Cities of San Diego and Imperial Beach, the San Diego Regional Water Quality Control Board, The California State Lands Commission, CalEPA, California Department of Fish and Wildlife, United States Department of Homeland Security, the National Oceanic and Atmospheric Administration and the United States Fish and Wildlife Service.

CONSISTENCY WITH LOCAL COASTAL PROGRAM POLICIES:

The proposed project is consistent with the following goals of the Tijuana River Valley Local Coastal Plan Land Use Plan:

Overall Goal: To provide flood protection commensurate with economic cost benefits for urbanized portions of south San Diego and Tijuana, Mexico, and to provide benefits to satisfy the International Treaty with Mexico – The proposed project will inform effective sediment management in the river valley that is critical to proper function of flood control infrastructure.

Overall Goal: To protect, preserve and restore natural coastal resources — As discussed in the "Project Summary" section above, the proposed project will inform local agencies to manage sediment more effectively to preserve the Tijuana River Valley and Estuary natural resources.

Overall Goal: To provide necessary public health and safety facilities and services, including Border Patrol operations, within the public lands portion of the planning area in keeping with the passive use of the natural environment - As discussed in the "Project Summary" section above, the proposed project will facilitate implementation of future capital projects to manage sediment in the service of promoting public health.

City of San Diego MSCP Subarea Plan's Multi-Habitat Planning Area (MHPA) Goal: Restore the Tijuana River Valley to a broad natural floodplain containing riparian and wetland habitats, bounded by high mesas and deep canyons with chaparral, sage scrub, and grasslands. — The proposed project will inform future capital projects that will serve to protect riparian and wetland habitats.

City of San Diego MSCP Subarea Plan's Multi-Habitat Planning Area Goal: Intermix the natural habitat with compatible agricultural, recreational and water quality improvement activities, all functioning in concert to maintain and enhance natural ecosystems and the local quality of life and environment. — The proposed project's sediment management plan will inform future capital projects that will contribute to critical water quality improvements for the Tijuana River Valley.

CONSISTENCY WITH LOCAL WATERSHED MANAGEMENT PLAN/STATE WATER QUALITY CONTROL PLAN:

"A Binational Vision for the Tijuana River Watershed", (Institute for Regional Studies of the Californias and the Department of Geography at San Diego State University, 2005) acknowledges that restoration and maintenance of the Tijuana River Estuary requires excavation of accumulated sediment, construction and routine excavation of sediment basins at canyon mouths draining into the estuary, and implementation of erosion control projects in the canyons draining into the estuary. The Proposed project will facilitate development of capital projects that control and/or manage sediment in the Tijuana River Valley.

The Water Quality Control Plan ("Plan") for the San Diego Basin recognizes the Tijuana River Estuary as an important resource and sets beneficial uses and water quality objectives for the river valley, estuary and tributary creeks in the Tijuana Watershed. One of the ways the San Diego Regional Water Quality Control Board implements its Plan is by issuing municipal storm water permits that include waste discharge requirements. As co-permittees, the City of San Diego, City of Imperial Beach and County of San Diego established the Tijuana River Watershed Urban Runoff Management Program ("Program") to plan and implement activities in order to comply with the municipal permit and reduce impacts of urban activity on receiving water quality within the watershed. The Program's annual report acknowledges the sediment excavation activities of the County of San Diego and City of San Diego and discusses the Tijuana River Valley Recovery Team work on reducing and controlling sediment in the river valley. The proposed project will provide a mechanism to support the sediment management activities identified in the Program by the co-permittees. In March 2015, the San Diego Water Board adopted Tentative Resolution No. R9-2015-0036, the Five Year Action Plan of the Tijuana River Valley Recovery Team. The Five-Year Action Plan identifies Preparation of a Sediment Management for the Tijuana River Valley as a Tier 1 project, indicating that it is among the highest priority projects for the Recovery Team. Thus, the proposed project is consistent with both the Local Watershed Management Plan and the State Water Quality Control Plan.

CEQA COMPLIANCE:

The proposed project is statutorily exempt from review under the California Environmental Quality Act pursuant to 14 California Code of Regulations ("CCR") Section 15262, because it will involve only planning studies and feasibility analyses to support development of future projects that are not yet approved, adopted or funded by the agency. Staff will file a Notice of Exemption upon approval of this project.